Mountain Pine Beetle Salvage and Road Access Through a Proposed Protected Area

Complaint Investigation 990214

Forest Practices Board

FPB/IRC/64

March 2002

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The Investigation

On August 11, 1999, the Omineca Community Forest Association complained to the Forest Practices Board with concerns about plans to log timber near Germansen Landing in the Mackenzie Forest District.

There are two parts to this complaint. The first part concerns an amendment to Slocan Forest Products' 1998-2002 forest development plan (FDP) for forest licence A15384. The amendment proposed three cutblocks in the Discovery Creek area to harvest timber damaged by mountain pine beetle infestation. The amendment was approved in August 1998. The complainant asserts that each of the three cutblocks is larger than the maximum allowed by the Code and is too large relative to the size of the pine beetle infestation.

The second part of the complaint concerns Slocan Forest Products' 1999-2003 FDP, which included 19 cutblocks in the Twenty Mile Creek area. The complainant asserts that the cutblocks were approved without specifying which existing road, or newly proposed road, would access the area.

On January 20, 2000, the Board expanded the scope of the investigation to include the adequacy of public review and comment, as this plan was approved during a transitional period of the Code. The Code was changed to provide certainty to cutblock and road approvals in FDPs. These changes affected the parameters for public review and comment on FDPs.

The Board investigation examines the following four questions:

Part 1 – Discovery Creek

Were the three Discovery Creek cutblocks larger than the Code allows?

Were the designs of the three Discovery Creek cutblocks appropriate to address the pine beetle infestation?

Part 2 – Twenty Mile Creek

Was there adequate opportunity for public review and comment on the 1999-2003 FDP?

Was the approval of the 1999-2003 FDP appropriate, considering the unresolved Twenty Mile Creek access issues?

Background

The Discovery Creek aspect of the complaint involves an amendment to Slocan Forest Products' (the licensee) 1998 FDP. In early 1998, the Ministry of Forests (MOF) identified a mountain pine beetle infestation north of Germansen Lake near the Omineca River and Discovery Creek. In the

spring of 1998, MOF undertook several beetle surveys to determine the extent of the problem. The ministry asked Slocan Forest Products to address the beetle problem and provided three beetle surveys. The licensee used the surveys to prepare a FDP amendment in the form of an expedited major salvage. The salvage had two key objectives: to a) salvage dead, dying and infested timber and b) pine bark beetle control. The licensee provided the required 10 days for public review and comment on the FDP amendment.

The Twenty Mile Creek aspect of the complaint involves 19 cutblocks approved in the 1999-2003 FDP. Twenty Mile Creek is south of Germansen Landing. At the time of the development plan approval, the provincial government was working on a land and resource management plan (LRMP) for the Mackenzie Forest District. The licensee, complainant and MOF all participated in the LRMP process. The LRMP planning table was considering an area to the north of Twenty Mile Creek as a potential protected area. The proposed Omineca protected area was between Twenty Mile Creek to the south and the Omineca River to the north.

The complainant supported the establishment of the Omineca protected area. The licensee's FDP proposed a road to the Twenty Mile Creek cutblocks through the proposed protected area, which would run west – parallel to the Omineca River – before turning south to the cutblocks at Twenty Mile Creek.

Relevant Legislation

Forest Practices Code of British Columbia Act

Section 10 - Forest development plans: content

Operational Planning Regulation

Section 1 - Definitions

Section 11 - Maximum cutblock size

Section 13 - Forest health assessment required before review of forest development plans

Section 18 - Map and information requirements for all forest development plans

Section 19 - Category I cutblocks and roads for information purposes only

Section 20 - Category A cutblocks

Section 21 - Limited protection for cutblocks and roads

Section 22 - Protection for cutblocks and roads

Part 1: Discovery Creek

Were the three Discovery Creek cutblocks larger than the Code allows?

Section 11(1) of the *Operational Planning Regulation* (OPR) limits the maximum size of cutblocks for the six forest regions in the province. In the Prince George Forest Region, the largest cutblock that can be proposed and approved is 60 hectares. The exception provided for in the OPR includes situations where the cutblocks are intended to recover timber damaged by pests or fires. Section 11(3)(b)(i)(A) of the OPR states that the district manager may approve a FDP that includes a cutblock larger than the maximum specified for a forest region if:

> Harvesting is being carried out to recover timber that was damaged by fire, insects, wind or other similar events and wherever possible, the cutblock incorporates structural characteristics of natural disturbance.

The amendment proposed harvesting both damaged and healthy timber to help control a mountain pine beetle outbreak in an extensive area with susceptible lodgepole pine timber types. The licensee proposed the amendment as an expedited major salvage operation.

Section 1 of the OPR defines an "expedited major salvage operation" as the harvesting of timber that is: dead, infested with pests, or otherwise damaged; or required to facilitate the removal of the dead, infested or damaged timber; or required as part of a sanitation treatment; and, which must be expedited to prevent the spread of insects or prevent a significant reduction in economic value of the timber. Section 1 of the *OPR* also defines "sanitation treatment" as tree removal or modification operations designed to reduce damage caused by forest pests and to prevent their spread.

In addition, the amendment stated that priority would be given to harvesting operationally feasible stands, and that within stands, non-insect infested green timber would be included to address operational constraints and ensure economic viability. The Board believes that harvesting, as described in section 11(3)(b)(i)(A) under an expedited major salvage operation as defined in the OPR, can include the harvesting of healthy trees for: operational requirements (i.e., skid trails), operational constraints (i.e., windfirm boundaries) and sanitation treatments; but, not for the harvesting of trees to ensure economic viability.

The amendment proposed cutblocks that were about three times the size of the infestation noted in the beetle survey information. The sizes of the proposed cutblocks were 83 hectares; 246 hectares; and 321 hectares. The beetle surveys indicated the areas infested were 30 hectares; 83 hectares; and 136 hectares respectively. The proposed cutblocks included harvesting of healthy, but susceptible timber. Harvesting susceptible timber during salvage operations is quite appropriate, and often necessary to help prevent the further spread of beetle. However, harvesting healthy trees to offset the cost of harvesting damaged timber was not appropriate in the circumstances of this case.

Section 11(3)(b)(i)(A) of the OPR also requires that cutblocks larger than 60 hectares, wherever possible, incorporate structural characteristics of natural disturbances. The *Biodiversity Guidebook* provides relevant advice about the structure and distribution of natural openings. The cutblocks were within a biogeoclimatic sub-zone that historically has had frequent stand-initiating events, such as extensive wildfires. The *Biodiversity Guidebook* recommends, for the biogeoclimatic zone in this case, that between 60 and 80 percent of the landscape unit have blocks 250 to 1,000 hectares in size. The *Biodiversity Guidebook* also makes stand-level (cutblock level) recommendations on how to incorporate structural attributes including wildlife trees, coarse woody debris, tree species diversity and understory vegetation diversity.

In this case, the licensee was following the guidebook recommendation to utilize an even-aged management system that includes wildlife tree patches. However, the FDP amendment stated that due to the beetle infestation, the proposed cutblocks would likely vary from the usual wildlife tree patch requirements for size, distribution and composition. Having stated this, the licensee also stated that the silviculture prescriptions would provide details about structural attributes such as wildlife tree patches, after further fieldwork was completed on the cutblocks. The amendment met the requirements to incorporate structural characteristics of natural disturbances within the cutblocks, wherever possible.

The Code allows for exceptions to be made with respect to the maximum allowable cutblock size for a region, as specified in section 11 of the OPR. The exception relevant to this case involved the expedited major salvage of mountain pine beetle infested and susceptible timber in an area with extensive lodgepole pine timber types.

According to OPR section 11(3)(b)(i)(A) and the OPR definitions for "expedited major salvage operation" and "sanitation treatment" a district manager has the discretion to allow for larger cutblocks to salvage dead, infested or otherwise damaged timber, as well as remove trees to help prevent the spread of pests. The licensee submitted an amendment to its FDP, as an expedited major salvage operation. The amendment included dead, damaged, and infested trees as well as healthy trees for sanitation purposes. However, the licensee also included healthy trees to help offset the cost of removing the dead and infested trees. This was not appropriate in the circumstances.

The district manager in his approval of the amendment on August 28, 1998 recognized that the size of the three cutblocks was larger than the original beetle surveys had indicated. The surveys noted that harvesting should not be restricted to the area of the survey, as the beetle infestation was expanding and had the potential to increase considerably. He also noted that the licensee had stated in the proposed amendment that the boundaries are preliminary and may be subject to change following the completion of field surveys (at the silviculture prescription stage) and the identification of operational constraints. There was a recognition that the data provided to the licensee by MOF had a limited amount of accuracy and that further field work would provide for greater accuracy at the silviculture prescription stage. Recognizing the urgency of the situation and the lack of accuracy in the survey data, the district manager

concluded that the amendment should be approved, as the three cutblocks encompassed the area necessary to address the forest health problem.

While the amendment proposed to harvest dead, dying and infested timber, it also proposed to harvest healthy timber for sanitation purposes, as well as economic viability. By attaching a condition to his approval, the district manager removed the economic viability option for the licensee. He did this by requiring the licensee to submit the subsequent silviculture prescription for the largest, and most contentious cutblock to address the mountain pine beetle issue specifically, and not to propose harvesting which is not clearly needed to address the pine beetle infestation. This condition recognised the nature of the proposal (expedited major salvage), the associated reduced public review period, concerns expressed during community meetings and the location of the block.

The Board further considered the size of the three cutblocks, as depicted in the silviculture prescriptions, and found that they were appropriate to address the mountain pine beetle infestation. The size and location of the cutblocks reflected recommendations contained in the *Bark Beetle Management Guidebook*. The cutblocks were designed to salvage timber as well as to prevent and control the spread of mountain pine beetles. The cutblocks also contained wildlife tree patches, which help to maintain stand attributes within a cutblock.

In conclusion, the licensee proposed a FDP amendment that was largely, but not totally consistent with section 11(3)(b)(i)(A) and the definitions of "expedited major salvage operation" and "sanitation treatment" of the *Operational Planning Regulation*. Additionally, the amendment proposed large cutblocks consistent with the *Biodiversity Guidebook* recommendations for the biogeoclimatic zone in this case. The district manager approved the amendment subject to a condition. The district manager's condition was to require the licensee to rationalize, in the silviculture prescription, the size of the largest and most contentious of the three cutblocks to specifically address the beetle issue.

Given that the beetle surveys indicated that harvesting should not be restricted to the area of the survey, that the beetle infestation had the potential to increase considerably, and that the licensee needed to plan for harvest prior to the next beetle flight (late summer 1999), the Board concludes that the three Discovery Creek cutblocks, as conditionally approved at the discretion of the district manager, were not larger than the Code allows.

Was the design of the three Discovery Creek cutblocks appropriate to address the pine beetle infestation?

Subsequent to the FDP amendment, the licensee reduced the size of all of the cutblocks in the silviculture prescriptions. The following table illustrates the approximate size of the cutblocks in the various documents.

Table 1

Cutting Permit	Beetle survey suggested cutblock size (hectares)	FDP amendment cutblock size (hectares)	Final cutblock size in silviculture prescription (hectares)
6797	136	321	162
6798	83	246	225
6799	30	83	72

Most notably, cutblock 6797 was reduced from 321 hectares to 162 hectares. The district manager accepted the licensee's reasoning for the reduced cutblock size and location. In October 1998, the district manager approved the silviculture prescriptions, saying he was satisfied that the licensee had addressed the issues raised in the FDP approval letter with the most contentious cutblock 6797.

MOF staff reviewed the silviculture prescription for cutblock 6797, to ensure it satisfied the condition the district manager attached to his approval of the FDP amendment. Staff concluded that the final size and location of the cutblock was justified. Staff stated that the northern part of the beetle survey contained a high deciduous component, and this area was removed from the cutblock. MOF staff also noted that the inclusion of some green wood along the south edge responded to operability concerns and some additional beetle attack. MOF staff reviewed timber cruise plots and confirmed that only a small number of plots contained beetle-infested trees (5 out of 40 cruise plots, or 12.5 percent). MOF staff concluded that although the cruise plots did not indicate a high level of beetle attack, the cruise plots were small, widely spaced and did not necessarily reflect an accurate level of beetle infestation and spread due to the scattered nature of initial pine beetle attacks. Staff stated a detailed beetle probe would help better delineate the area to harvest, but it would further delay managing the beetle problem. MOF staff concluded that the licensee's rationale supported exclusion of some infested timber and inclusion of some timber not identified in the original beetle survey.

The licensee was still obligated to conduct follow-up forest health activities as committed to in the FDP amendment for areas that were not harvested, and which contained infested timber. Follow-up treatments, consistent with the *Bark Beetle Management Guidebook*, may include use of trap trees, peel and burn treatments, surveys and pheromone baiting with further salvage harvesting if needed. The licensee harvested most of the cutblocks during the winter of 1998-99, prior to the summer beetle flight. The licensee consequently baited the remaining standing timber patches and harvested the remainder of the cutblocks in the fall of 1999.

The Board concludes that the three Discovery Creek cutblocks, as depicted in the silviculture prescriptions, addressed the mountain pine beetle infestation by harvesting both infested and susceptible timber and were therefore of appropriate design.

Part 2: Twenty Mile Creek

Was the opportunity for public review and comment on the 1999-2003 FDP adequate?

Section 27(4)(a) of the *Operational Planning Regulation* (OPR) specifies that the public review and comment period has to be at least 60 days if the amendment is required for an expedited major salvage operation. As part of the public review and comment process, the licensee consulted with various interest groups in the Germansen Landing area, including the complainant.

The 1999-2003 FDP maps correctly indicated that the Twenty Mile Creek cutblocks were approved in 1998. However, due to changes in the OPR and related Code transitional provisions, the public was given a second opportunity to review and make comments on the Twenty Mile Creek cutblocks on the 1998 and 1999 FDPs. Therefore, the Board concludes that the public's opportunity to comment on the FDP was adequate.

Was the approval of the 1999-2003 FDP appropriate, considering the unresolved Twenty Mile Creek access issues?

There are two existing roads leading into the Twenty Mile Creek area. One road comes from the west, from the Fort St. James Forest District, and the other road provides access from the east along Germansen Lake. Neither road was suitable for conventional log hauling without upgrading and possible re-alignment. The licensee's FDP proposed a new road into the Twenty Mile Creek area from the north, parallel to the Omineca River until it turned south into the Twenty Mile Creek area. This original plan was available for public review and comment, however the LRMP planning table was considering the area along the Omineca River for designation as a protected area. The proposed road conflicted with the proposed protected area.

The original FDP made available for public review and comment complied with the requirements for roads as specified in section 10 of the Act and section 18 of the OPR. The FDP identified the licensee's proposed road and it identified two existing roads in the area.

Prior to the FDP approval, the licensee submitted a revised development plan. The licensee and district manager had discussed the implications the proposed road held for the LRMP planning process. The district manager was concerned that approving the proposed road along the Omineca River could compromise the LRMP process and pre-empt designation of the Omineca area as a protected area. The MOF directed the licensee to either remove the Twenty Mile Creek cutblocks, or agree not to submit silviculture prescriptions, logging plans or cutting permits until there was a decision about the protected area and the access issue was resolved. The licensee agreed to these conditions and removed the proposed road from the final submission of the FDP. The licensee left the proposed cutblocks and the existing roads in the FDP, but changed the road from a proposed category "A" road to a category "I" road. A category "I" road is for information purposes only, and is not part of the approved FDP.

The district manager approved the plan on July 12, 1999. The cutblocks were given category "A" status. Although the proposed road was removed from the plan, the two existing roads were still identified in the plan, and subsequently the final submission of the FDP still complied with section 10 of the Act and section 18 of the OPR. The approved plan included maps describing the location of existing roads that provide access to the cutblocks. The approval of the FDP was appropriate. In subsequent development plans, the licensee would be required to identify which of the existing roads they would use (and likely upgrade) or identify a new road into the area.

Although the issue of access into the area was undecided, there were two existing roads into the area. As well, the district manager attached a condition to his approval, which would delay forest development until the protected area and access issues were resolved.

Since this investigation, on November 14, 2000, Cabinet approved the Mackenzie LRMP. The plan designated 10 new protected areas, including the Omineca area. The Mackenzie LRMP established a corridor under the *Environment and Land Use Act* to allow access to the Twenty Mile Creek area. The corridor allows the construction of a logging road along the north side of Germansen Lake, partly using an existing road.

Conclusions

Part 1 – Discovery Creek

Were the three Discovery Creek cutblocks larger than the Code allows?

Section 11(1) of the OPR limits the maximum size of cutblocks for the six forest regions in the province. In the Prince George Forest Region, the largest cutblock that can be proposed and approved is 60 hectares. The exception provided for in section 11(3)(b)(i)(A) in the OPR, includes situations where the cutblocks are intended to recover timber damaged by pests or fires. The licensee proposed a FDP amendment that was largely but not totally consistent with section 11(3)(b)(i)(A) and the definitions of "expedited major salvage operation" and "sanitation treatment" of the OPR. Additionally, the amendment proposed large cutblocks consistent with the *Biodiversity Guidebook* recommendations for the biogeoclimatic zone in this case. The district manager approved the amendment subject to a condition. The district manager's condition was to require the licensee to rationalize, in the silviculture prescription, the size of the largest and most contentious of the three cutblocks to specifically address the beetle issue. Given that the beetle surveys indicated that harvesting should not be restricted to the area of the survey, that the beetle infestation had the potential to increase considerably, and that the licensee needed to plan for harvest prior to the next beetle flight (late summer 1999), the Board concludes that the three Discovery Creek cutblocks, as conditionally approved at the discretion of the district manager, were not larger than the Code allows.

Was the largest of the three Discovery Creek cutblocks too big, relative to the pine beetle infestation?

The Board concludes that the three Discovery Creek cutblocks, as depicted in the silviculture prescriptions, addressed the mountain pine beetle infestation by harvesting both infested and susceptible timber and were therefore of appropriate design.

Part 2- Twenty Mile Creek

Was the opportunity for public review and comment on the 1999-2003 FDP adequate?

The public was given an opportunity to comment on the Twenty Mile Creek cutblocks in both the 1998 and 1999 FDPs. Therefore, the Board concludes that the public's opportunity to comment on the FDP was adequate.

Was the approval of the 1999-2003 FDP appropriate, considering the unresolved Twenty Mile Creek access issues?

The district manager approved the FDP on July 12, 1999. Although the proposed road was removed from the plan, the two existing roads remained in the plan. Subsequently, the final FDP submission still complied with the Code. As well, the district manager attached a condition to his approval, which would delay forest development until the protected area and access issues were resolved. The approval of the FDP was appropriate.